Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently amended) A method for making a first polypeptide in the form of inclusion bodies, said method comprising

(a) obtaining a bacterial host cell comprising a first nucleic acid molecule encoding said first polypeptide operatively linked to a second nucleic acid molecule encoding an inclusion partner protein thereby forming a gene fusion construct; ~~and~~

(b) cultivating said bacterial host cell under conditions favoring production of said first polypeptide as inclusion bodies in said host cell to produce the first polypeptide, and

(c) incubating the first polypeptide with a protein-binding dye to bind the protein-binding dye to the first polypeptide.

Claims 2-68 (Cancelled).

69. (New) The method of claim 1, further comprising admixing the polypeptide with a plurality of polypeptides of different molecular weights to form a plurality of molecular weight markers.

70. (New) The method of claim 1, further comprising admixing the polypeptide with a plurality of polypeptides of different molecular weights to form a molecular weight ladder.

71. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a bacterial inclusion partner protein.

72. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin or a modified thioredoxin inclusion partner having the ability to form inclusion bodies upon expression in a bacterial host cell.

73. (New) The method of claim 72, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes an *E. coli* thioredoxin or a modified an *E. coli* thioredoxin inclusion partner having the ability to form inclusion bodies upon expression in a bacterial host cell.

74. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes E. coli maltose-binding protein, E. coli RNAse II, E. coli alkaline phosphatase, E. coli phospholipase A, E. coli P-lactamase, Salmonella typhimurium MalK protein, Clostridium thermocellum endoglucanase D, Bacillus thuringiensis subsp. aizawai IPL7 insecticidal proteins, human procathepsin B, porcine interferon-.gamma., T5 DNA polymerase, or modified versions thereof, having the ability to form inclusion bodies upon expression in a bacterial host cell.

75. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a modified thioredoxin inclusion partner having the ability to form inclusion bodies upon expression in a bacterial host cell.

76. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a truncated thioredoxin inclusion partner having the ability to form inclusion bodies upon expression in a bacterial host cell.

77. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a carboxy terminal-truncated thioredoxin inclusion partner having the ability to form inclusion bodies upon expression in a bacterial host cell.

78. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin inclusion partner having a truncation of between 2 and 50 carboxy terminal amino acids.

79. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin inclusion partner having a truncation of between 33 and 50 carboxy terminal amino acids.

80. (New) The method of claim 78, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin inclusion partner having a truncation of between 2 and 33 carboxy terminal amino acids.

81. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin inclusion partner having a truncation of between 2 and 22 carboxy terminal amino acids.

82. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin inclusion partner having a truncation of between 23 and 33 carboxy terminal amino acids.

83. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin inclusion partner having a truncation of 23 carboxy terminal amino acids.

84. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule, wherein the second nucleic acid molecule encodes a thioredoxin having a molecular weight of 10 kD.

85. (New) The method of claim 1, wherein the obtaining step comprises obtaining the bacterial host cell comprising the second nucleic acid molecule encoding a carboxy terminal-truncated form of *Escherichia coli* thioredoxin which is encoded by a nucleic acid molecule having a nucleotide sequence as set forth in SEQ ID NO:8.

86. (New) The method of claim 1, wherein the obtaining step comprises obtaining an *E. coli* cell.

87. (New) The method of claim 1, wherein the method is repeated for a second polypeptide.

88. (New) The method of claim 87, wherein the second polypeptide is admixed with the first polypeptide to form a molecular weight marker set.

89. (New) The method of claim 87, wherein the method is repeated for a third polypeptide.

90. (New) The method of claim 89, wherein the third polypeptide is admixed with the first polypeptide and the second polypeptide to form a molecular weight marker set.

91. (New) The method of claim 1, further comprising isolating the inclusion bodies from the bacterial host cell.

92. (New) The method of claim 1, further comprising releasing the polypeptide from the inclusion bodies.

93. (New) The method of claim 1, wherein the obtaining step comprises obtaining a bacterial host cell comprising a protein-specific cleavage site between the first nucleic acid molecule and the second nucleic acid molecule.

94. (New) The method of claim 1, wherein the cultivating step results in production of the first polypeptide, wherein the first polypeptide comprises a multimer.

95. (New) The method of claim 94, wherein the cultivating step results in production of the first polypeptide, wherein the first polypeptide comprises a multimer of thioredoxin or a modified thioredoxin inclusion partner having the ability to form inclusion bodies upon expression in a bacterial host cell.

96. (New) A method for making a stained molecular weight marker, said method comprising

(a) producing a thioredoxin polypeptide comprising thioredoxin or a modified thioredoxin having the ability to form inclusion bodies upon expression in a bacterial host cell; and

(b) incubating the thioredoxin polypeptide with a protein-binding dye to form a stained molecular weight marker.

97. (New) The method of claim 96, further comprising admixing the thioredoxin polypeptide with a plurality of stained polypeptides of different molecular weights to form a plurality of pre-stained molecular weight markers.

98. (New) The method of claim 96, further comprising admixing the thioredoxin polypeptide with a plurality of stained polypeptides of different molecular weights to form a pre-stained molecular weight ladder.

99. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide comprising an *E. coli* thioredoxin or a modified *E. coli* thioredoxin having the ability to form inclusion bodies upon expression in a bacterial host cell.

100. (New) The method of claim 96, wherein the producing step comprises producing a modified thioredoxin polypeptide comprising a modified thioredoxin having the ability to form inclusion bodies upon expression in a bacterial host cell.

101. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide comprising a truncated thioredoxin having the ability to form inclusion bodies upon expression in a bacterial host cell.

102. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide comprising a carboxy terminal-truncated thioredoxin having the ability to form inclusion bodies upon expression in a bacterial host cell.

103. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide comprising a thioredoxin having a truncation of between 2 and 50 carboxy terminal amino acids.

104. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide comprising a thioredoxin having a truncation of between 33 and 50 carboxy terminal amino acids.

105. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide having a truncation of between 2 and 33 carboxy terminal amino acids.

106. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide having a truncation of between 2 and 22 carboxy terminal amino acids.

107. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide having a truncation of between 23 and 33 carboxy terminal amino acids.

108. (New) The method of claim 96, wherein the having a truncation of 23 carboxy terminal amino acids.

109. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide having a molecular weight of 10 kD.

110. (New) The method of claim 96, wherein the producing step comprises producing a thioredoxin polypeptide having a carboxy terminal-truncated form of *Escherichia coli* thioredoxin which is encoded by a nucleic acid molecule having a nucleotide sequence as set forth in SEQ ID NO:8

111. (New) The method of claim 96, wherein the method is repeated for a second polypeptide.

112. (New) The method of claim 111, wherein the second polypeptide is admixed with the first polypeptide to form a molecular weight marker set.

113. (New) The method of claim 111, wherein the method is repeated for a third polypeptide.

114. (New) The method of claim 113, wherein the third polypeptide is admixed with the first polypeptide and the second polypeptide to form a molecular weight marker set.

115. (New) The method of claim 96, wherein the producing step results in production of thioredoxin polypeptide, wherein the thioredoxin polypeptide comprises a multimer.

116. (New) The method of claim 96, wherein the producing step results in production of the thioredoxin polypeptide, wherein the thioredoxin polypeptide comprises a multimer of thioredoxin or a modified thioredoxin having the ability to form inclusion bodies upon expression in a bacterial host cell.